



Solutions for
Small Business

Choosing a Server to Fit your Business



A step-by-step guide to help businesses maximize the benefits of Intel® Xeon® processor-based server solutions.

Your business can't afford to miss out on necessary technology upgrades, but you also can't throw money at every new idea that comes on the market. In other words, your IT solutions can't be too big, and they can't be too small.





Not too big. Not too small. Just right.

Intel®-based server solutions, designed specifically for businesses like yours, are just right. Servers based on Intel's reliable, proven technology come in many sizes and configurations to fit your essential business functions, without making you pay for features you don't need. With the right server—a computer designed to store, manage, distribute, and process data—you'll discover new possibilities for your business. You'll be able to:

- Combine and share information from formerly isolated desktops
- Share equipment such as printers
- Expand your business capacity with more powerful applications
- Back up your company information to prevent data loss
- Enhance system security

To help you maximize the benefits of server technology, this deployment guide will take you step-by-step through the server deployment process. Begin by exploring the question of whether a server is right for your business. Then you can determine which type of server is just right for your business.





What servers are not:

Servers are not overpriced desktops: a server is a computer that is designed specifically to store, manage, distribute, and process data quickly and efficiently, with extra reliability and security features to protect data and business operations plus extra manageability features that make them simple and affordable to own. Servers are also not expensive computers needed only by Fortune 500 companies. Here are a few other things servers are not:

Servers are not enterprise-only.

Large businesses may need more and larger servers, but businesses of all sizes will benefit from server-based applications that can offer centralized storage, enhanced security, and improved productivity.

Servers are not overrated.

Servers help prevent major data loss, an under-recognized cause of business failure. DTI Research found that 70 percent of businesses that experience a major data loss go out of business within 24 months.

Servers are not overpriced.

Intel-based servers are affordable and include manageability features that keep additional costs to a minimum.

Servers are not complicated to own.

You don't need a full-time IT staff to own or manage a server. In fact, Intel® Xeon® processor-based server platforms have advanced security and manageability features to protect your business and simplify server management, so they can help save you time and energy while increasing your business efficiency.

Servers are not disruptive.

Adding a server to your computing infrastructure is not much more difficult than adding a new PC to your network, and resellers, consultants, or other experts are available to lend you a hand if you need help.

What servers are:

Servers are computers designed to handle large amounts of business data, and they have the power to run software that performs specific business-wide tasks such as file sharing or Web hosting. Servers can also provide:

Efficiency.

Intel-based server solutions help businesses of all sizes run more efficiently, increasing revenues, lowering costs, and supporting business growth.

Scalability.

Because you can add capacity and capability, servers can address both your current and future business needs.

Power.

Servers are more powerful than desktop computers and can support more sophisticated software applications, such as customer relationship management (CRM) software, plus more users and information.

Reliability and security.

Servers can help you keep critical applications up and running, plus they can help prevent computer viruses and unexpected data loss.

Proven value.

More than 300 million servers with Intel Xeon processors are powering businesses all around the world today, and Intel's more than 20 years in the server business help ensure that Intel-based solutions deliver industry-leading reliability and performance.



Step 1:

Understand the roles of PCs and servers.

To understand the role of servers, you first must understand the role of personal computers. Individual desktop computers are the workhorses of most small businesses, storing important data and running the basic applications each business demands. Personal computers are limited, however, in their ability to store large amounts of information while still running quickly and smoothly. In addition, each desktop is a separate entity, not designed to collaborate and communicate with the other computers at your workplace.

If you've already noticed the limitations of your desktop computers—or if you anticipate a future need to run more applications, store more data, or add greater communication between your computers—it's probably time to buy a server.

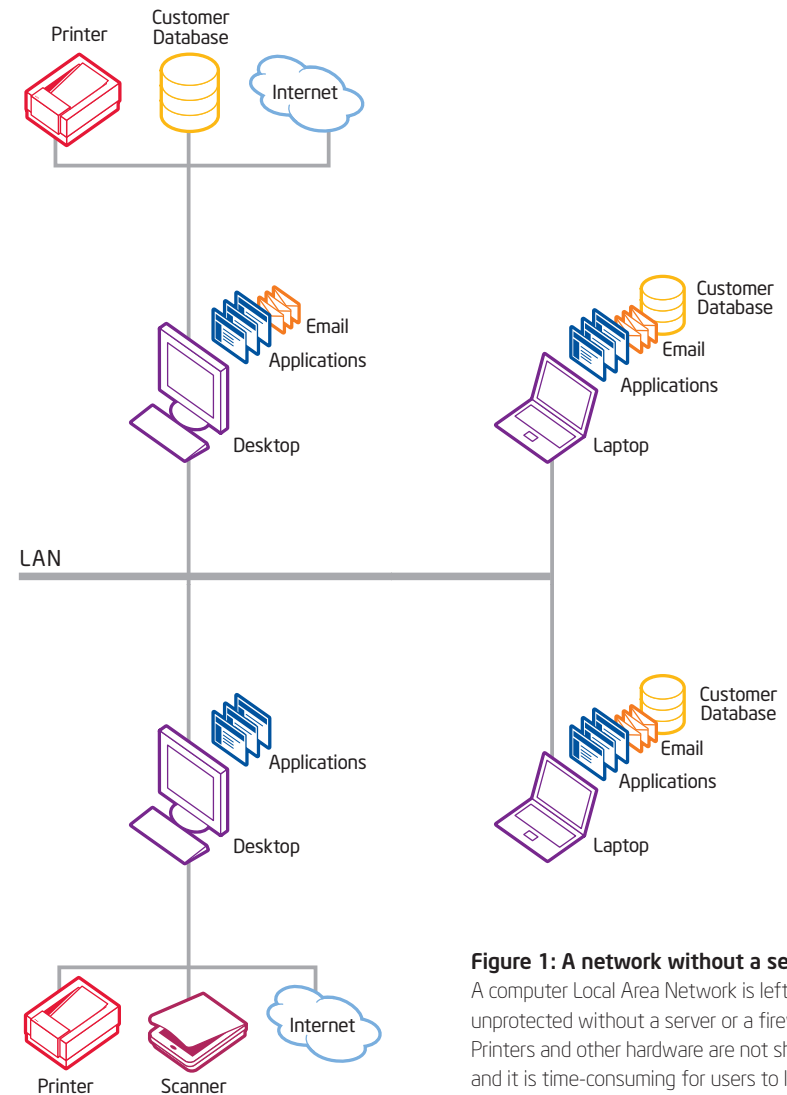


Figure 1: A network without a server.

A computer Local Area Network is left unprotected without a server or a firewall. Printers and other hardware are not shared, and it is time-consuming for users to locate information on each other's desktops.

Servers help you avoid the tangle of desktop-to-desktop connections and provide better protection for your business data. When multiple workstations need to connect to the same systems and tools, having them reside on one server instead of individual PCs gives you more efficient communication, better application performance and increased security options.

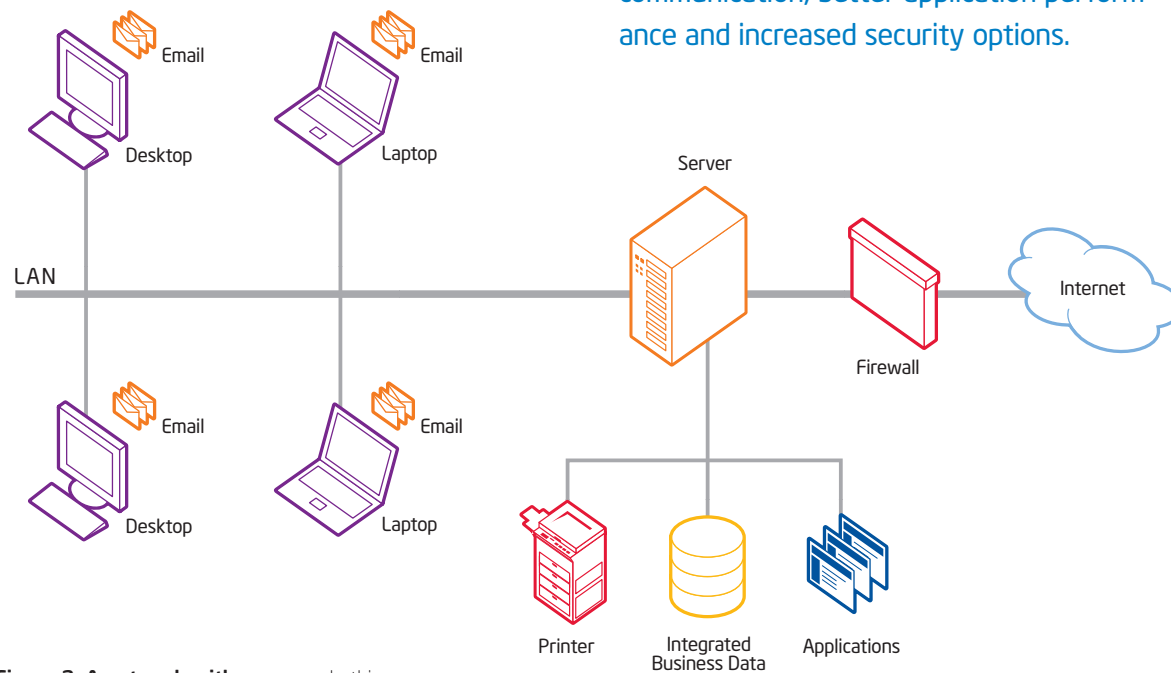


Figure 2: A network with a server. In this figure, a network of PCs and laptops plus a server are protected behind a firewall. Users can easily share data and resources, while the server provides additional data protection and stability.

Is it time to buy a server?

Place a checkmark by any of the following items that apply to your business.

You need an efficient, reliable way for multiple computers in your business to share information.

You need to protect your business information and network from unauthorized users.

You need to back up information on a regular basis.

You could benefit from sharing equipment such as printers and scanners.

You and your employees need immediate secure access to company information and resources while away from the office.

You and your employees need simultaneous access to shared files, e-mail, or applications.

You would like to implement advanced software applications such as CRM tools.

You need to host your own Web site and email system.

You need to communicate more effectively with customers, employees, and suppliers.

You want access to comprehensive business data and information that provides insight into your business' health.

If you have checked more than one item, you should consider deploying a server.



Step 2:

Decide if a server is right for your business.

To decide if a server is right for your business, first look at your current workload. If your business involves few employees and little reliance on large amounts of data or shared communications, and your data is not sensitive to theft or destruction, then desktop computers may serve your purposes at this time.

If, however, you work on a network, manage large amounts of data, would like to allow employees to share and have access to files, or need greater security and data protection, then you probably need a server simply to meet your current business needs.

Growing businesses should also consider future demands when deciding whether to deploy a server. Ask yourself whether you would like to implement any of the following, generally server-based functions, in the near future:

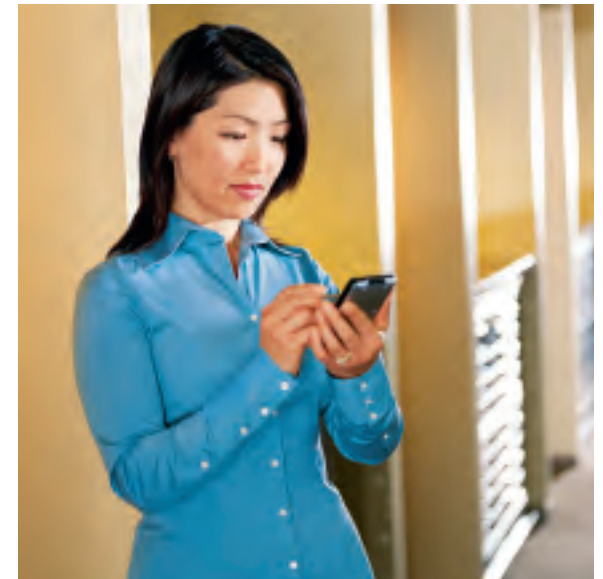
- A company intranet or internally hosted Web site
- Business applications such as customer relationship management (CRM) or enterprise resource planning (ERP) programs to better handle key business areas
- A firewall or other advanced security system
- Messaging and collaboration tools
- E-commerce solutions

By looking carefully at the work you do now and anticipating the type of work you will be doing in six months to a year, you should be able to determine whether a server makes sense for your business.

Step 3:

Prioritize your business needs.

Begin by defining your general goals (see the checklist on the previous page) then establish your priorities. Based on your business model, which goals do you want to target first? Do you need to set up an e-commerce site first? Or is it more important right now to connect employees to a printer network? Are you ready for collaborative software such as CRM tools, or do you want to start with shared calendars?



Step 4:

Choose your server function.

Now that you've identified and prioritized your business goals, it's time to narrow your focus. You need to decide which function you need your server to fill. Does your business need, for example, a file and print server, a Web and email server, or a database server? Keep in mind that a larger business may need multiple servers, while smaller businesses may be able to "double up" multiple functions on a single server.

Most small businesses begin with a file and print server. As the name suggests, these servers store data and files and manage printing services. In other words, they take some of the burden off individual PCs, freeing the desktops so they can get back to their work while the server performs the heavy lifting, and they allow more users to share printers and other devices, which can save you money. As your business grows, you can add additional servers or expand your current servers to meet your changing business needs.

To choose the server function that best fits your business needs, ask yourself and your staff the following questions:

Software

Do you want to add additional software packages, such as database software?

If you will add software, what are its requirements, such as processor speeds and required memory?

How is it priced? (Licensing fees may be per user or per server. It might even cost less to share one server-based version among users than to buy multiple copies for individual desktops.)

Have you talked with the software vendor or reseller about server requirements for the software (operating system requirements, memory requirements, etc.)?

Equipment

How many scanners, printers, and other types of office equipment do you have now, and how many will you add in the near future? Are connections between your equipment and your employees causing delays in your workflow?

How many desktops are there in your company, and do employees need to share information or run applications on each other's desktops? Are any of the desktops overloaded with the applications they are running or the amount of data they are processing?

Do you have any storage appliances that need to be accessible to multiple employees?

Safety and security

Would a major data loss cripple your business?

Do you back up your data on a regular, frequent basis?

Do you control access to sensitive business data?

Data and storage

How much data do you currently manage and store?

How much data do you anticipate needing to accommodate in the next year or so?

Users and employees

How many employees do you have now, and how many do you expect to add in the near future?

If you have a Web site, how many visitors do you have now, and how many would you like to have in the near future?





Step 5:

Plan for deployment.

Once you've settled on your general goal and server function, it's time to plan for deployment of your server. For a fast and efficient deployment, begin by answering questions specific to your business. Your local system integrator, reseller, consultant, or other technical advisor can help with this step.

Capital Expenditure

What will be the upfront capital outlay for the new server?

What will be the ongoing operation and maintenance costs?

Will it be more cost-effective to lease or buy?

Power

How much power do you currently have?

Will you need additional power to operate your new server and system?

Space

Where will you put the server?

Do you have safe, available office space for the new server?

Networking

How will employees connect to the server?

How will devices such as printers, scanners, storage appliances, or multi-function devices connect?

Maintenance

Who will maintain the server?

Will maintenance be outsourced? If so, to whom?

Can an in-house person do simple, routine tasks such as running backups?

Automation

Which parts of your existing processes and systems will change due to automation?

How much training time will be necessary, based on the changes?

Staff Effects

Which staff members will be affected by the new server?

Who will train employees to use any new applications?

Process Interruption

How much time will be needed to implement the new server? (Expect some short-term slowing as your staff learns the new system.)

What is the best time to switch over to the new system?

How can you minimize downtime and its impact on business?

Data Transfer

What data, if any, will need to be transferred to a new database?

How can you manage the transfer in a way that minimizes business interruption?

Special Requirements

What, if any, special requirements will your new system need to accommodate? (Examples include HIPAA or other privacy laws, ISO-9000 or JCAHO compliance, Sarbanes-Oxley, etc.)

Integration with Existing Server(s)

How will the new system and server integrate with your existing system?

Is the software for the new system written by the same vendor who wrote your current software? (If so, integration will likely be easier.) If not, how will this affect integration?

If you have questions during the course of your business assessment, the purchase of your server, or its deployment, you can contact your local system integrator, reseller or technical advisor for advice and assistance.



Final Step:

Choose the right server with the right technology.

When you deploy a server built on the Intel Xeon processor-based platform, your desktops will become partners in a seamless, integrated system. Whether your new server is used for Web hosting or file sharing, your business will experience enhanced efficiency, productivity, and security. Simply put, your server will connect, protect, and power your business in ways you've never imagined.

With more than 20 years in the server industry, Intel gives small businesses reliable, cost-effective, and flexible server technology. Intel-based servers are affordable to own and operate, with advanced system management features that keep installation and maintenance costs to a minimum. In addition, Intel® server technology is built using industry standards, so you have more freedom to choose among a wide range of hardware vendors and from thousands of off-the-shelf business software products.

Server solutions based on Intel Xeon processors deliver powerful business capabilities at small-company prices, so you can reach new customers, increase your revenue and achieve your business goals. A server based on an Intel Xeon processor can help you increase staff productivity and efficiency, improve customer satisfaction levels, and expand your business with improved information access, faster communication, and new applications such as email marketing and CRM. With outstanding reliability, security and support, server solutions based on Intel Xeon processors help protect and power your business.



Visit our Small Business Resource Center to learn more about how Intel-based server solutions can benefit your business: www.intel.com/smallbusiness

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